

POSTER PRESENTATION

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Prognosis of mechanically ventilated patients entering the weaning process

G Beduneau^{1*}, T Pham^{2*}, JCM Richard³, F Schortgen⁴, JM Chretien⁵, A Mercat⁶, J Mancebo⁷, L Brochard⁸,
WIND Study Group on behalf of REVA Network

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Introduction

The WIND study “Weaning according to New Definition” prospectively collected epidemiologic data concerning mechanical ventilation (MV) and weaning. The aim of the present analysis was to specifically address mortality at the different pre-defined steps of the weaning process.

Methods

This is a subsequent analysis of the original prospective observational study run in 36 intensive care units in France, Spain and Switzerland over a three month period. All patients requiring intubation and MV were enrolled. MV modality, results of spontaneous breathing trials (SBT) and extubation, therapeutic limitation as well as survival were daily collected until ICU discharge or day 60. A weaning attempt (WA) was defined either by a spontaneous breathing trial or a direct extubation (planned or unplanned). Weaning success was defined as discharged alive without mechanical ventilation within the 7 days following extubation. The prognosis of patients at the key steps of the weaning process was analysed as mortality at ICU discharge or D60.

Results

2729 patients were enrolled and 20 specifically intubated for upper airway obstacle were excluded. 2709 patients

were analysed among whom 2051 entered the weaning process (i.e. had at least one WA). Prognosis is reported on table 1 for the whole cohort, for the patients entering weaning, after failure of the first WA and for the patients still ventilated 7 days after the first WA.

Conclusions

Based on this large cohort of intubated patients, mortality was 10% for the patients entering the weaning process but was three times higher (33%) in patients failing their 1st WA; 63% of the deaths occurred within one week after the failed WA. The present analysis is the first to document mortality along different steps of the weaning process as experienced in daily practice.

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*GB and TP are considered both as first authors.

Authors' details

¹University Hospital, Rouen, France. ²Medical and Surgical Intensive Care, Hôpital Tenon, APHP, Paris, France. ³Annecy Genevois General Hospital, Annecy, France. ⁴Medical ICU, CHU Henri Mondor, APHP Paris, Paris, France. ⁵Clinical Research Institute Angers University Hospital, Angers, France. ⁶Medical Intensive Care, University Hospital Angers, Angers, France. ⁷Hospital de Sant Pau, Barcelona, Spain, Barcelona, Spain. ⁸Saint Michael's

Table 1. After failure of 1st WA, 125 patients (among the 197 dead) died in the seven first days

	Intubated patients	Entering weaning (WA)	Failure 1st WA	Still ventilated 7 days after 1st WA
Patients (N)	2709	2051	605	218
Mortality, % (N)	28 (771)	10 (205)	33 (197)	28 (62)

¹University Hospital, Rouen, France

²Medical and Surgical Intensive Care, Hôpital Tenon, APHP, Paris, France

Full list of author information is available at the end of the article

Hospital and Keenan Research Centre, Interdepartmental Division of Critical Care, University of Toronto, Toronto, Canada.

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